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(54) Title: ANTIVIRAL PROTEINS WITH IMPROVED PROPERTIES AND METHODS THEREFOR

Gene and AA sequence

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M L G K F S Q T C Y N S A I Q G S V L T S T C E R T N G G
1 AGGAGGACAG CTATGCTGGG CAAGTTCAGC CAGACCTGCT ACAACAGCGC GATTCAGGGC AGCGTTCTGA CCAGCACCTG CGAACGTACC AATGGTGGCT
TCCTCCTGTC GATACGACCC GTTCAAGTCG GTCTGGACGA TGTGTGCGG CTAAGTCCCG TCGCAAGACT GGTCTGGGAC GCTTGATGG TTACCACCGA

Y N T S S I D L N S V I E N V D G S L K W Q P S N F I E T C R N T Q
101 ACAACACTTC TAGCATTGAT CTGAACAGCG TGATTGAGAA TGTGGATGGC TCTCTGAAT GGCAGCCGAG CAACTTCATT GAAACCTGTC GCACACCCA
TGTTGTGAAG ATCGTAAC TAATTGTGCG ACTACTCTT ACACCTACCG AGAGACTTTA CCGTCGGCTC GTTGAAGTAA CTTTGGACAG CGTTGTGGST

L A G S S E L A A E C K T R A Q Q F V S T K I N L D D H I A N I D
201 GCTGGCGGGC AGCTCTGAAC TGGCGGCGAG ATGCAAGACT CGCGCGCAGC AGTTTGTGAG CACCAAGATC AACCTGGACG ATCACATCGC GAACATTGAT
CGACCGCCCG TCGAGACTTG ACCGCGCTCT TACGTTCTGA GCGCGCGCTG TCAACACTC GTGGTCTAG TTGGACCTGC TAGTGTAGCG CTTGTAACTA

G T L K Y E #
301 GGCACCTGA AGTATGAATA A
CGGTGGACT TCATACTAT T

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(57) Abstract: The invention provides novel recombinant proteins and compositions having non-naturally occurring N-terminal amino acids such as methionine, and methods of making and using the protein for greater anti-viral activity and less toxicity than naturally occurring proteins.